

Title (en)
Transformation method of a microorganism.

Title (de)
Verfahren zur Änderung eines Mikroorganismus.

Title (fr)
Procédé pour la transformation d'un microorganisme.

Publication
EP 0063764 A1 19821103 (EN)

Application
EP 82103223 A 19820416

Priority
JP 5818781 A 19810417

Abstract (en)
[origin: JPS57186492A] PURPOSE:To carry out easily the transformation of a bacterium belonging to the genus Corynebacterium or Brevibacterium, by integrating DNA into the protoplast of the bacterium. CONSTITUTION:A bacterium belonging to the genus Corynebacterium or Brevibacterium is propagated under a condition for making it susceptible to a cell wall dissolving enzyme lysozyme, the cultivated cell is treated with lysozyme in a hypertonic solution, so the cell wall is dissolved and removed to prepare a protoplast. The protoplast and deoxyribonucleic acid (DNA) are incubated in the presence of polyethylene glycol or polyvinyl alcohol and a bivalent metal cation, so that the protoplast is integrated into DNA. The protoplast is cultivated in a medium, reversed and regenerated to a normal cell, and a strain having a genetic character derived from the given DNA is collected.

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• [YP] FR 2482622 A1 19811120 - AJINOMOTO KK [JP]
• [YP] GB 2076853 A 19811209 - AJINOMOTO KK
• [Y] CHEMICAL ABSTRACTS, vol. 88, no. 17, 24th April 1978, page 281, no. 117909m, Columbus, Ohio, USA
• [A] AGRICULTURAL & BIOLO. CHEM., vol. 43, no. 5, May 1979, pages 1007-1013
• [AP] CHEMICAL ABSTRACTS, vol. 95, no. 17, 26th October 1981, page 296, no. 146601e, Columbus, Ohio, USA
• [AP] CHEMICAL ABSTRACTS, vol. 95, no. 23, 7th December 1981, page 368, no. 200491j, Columbus, Ohio, USA & JP - A - 81 109 587 (KYOWA HAKKO KOGYO CO., LTD.) 31-08-1981

Cited by
US4690897A; EP0155594A3; US4514502A; EP0124048A3; EP0093611A1; EP0401735A1

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